



NTSB National Transportation Safety Board

Office of Highway Safety

Agencies and Companies Involved in Ceiling Design and Construction

Project Management

- Federal and State oversight
- Private management consultant
- Central Artery/Tunnel Project subdivided into a number of sections
 - 38 section design contracts
 - 142 construction contracts
- Section Design Consultant responsible for final design

Project Oversight

Federal Highway
Administration



MassHighway
Mass. Turnpike Authority

Design and Construction

Bechtel/Parsons Brinckerhoff (B/PB)



Gannett Fleming, Inc.



Conam
Inspection, Inc.



Modern Continental
Construction, Inc.

Epoxy

Sika
Corporation



Powers
Fasteners, Inc.



Newman
Renner
Colony, Inc.

Project Oversight

**Federal Highway
Administration**

- Provided funding
- Reviewed contracts for adherence to Federal regulations

**MassHighway
Mass. Turnpike
Authority**

- Awarded contracts
- Approved funds
- Oversight of project's program manager
- Ownership

Ceiling Design & Construction

**Bechtel/Parsons
Brinckerhoff (B/PB)**

- Managed Gannett Fleming
- Reviewed specifications
- Secondary review of contractor submittals

Gannett Fleming

- Final design
- Ensured adequacy of materials
- Primary review of contractor submittals

Conam Inspections

- Proof tested all ceiling anchors

Modern Continental

- Installed ceiling system
- Selected materials
- Submitted materials for approval

Epoxy Used for Ceiling Anchors

Sika Chemical Corporation

- Formulated the epoxy
- Sold the epoxy in bulk to Powers Fasteners

Powers Fasteners

- Supplier of anchor systems
- Repackaged and sold the epoxy to NRC

Newman Renner Colony (NRC)

- Distributor of construction supplies
- Sold the epoxy to Modern Continental

Modern Continental

- Used NRC-1000 Gold to install the ceiling anchors



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